

RECEIVED

MAY 06 1993

SUPERFUND REMEDIAL BRANCH



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. BOX 47600 • Olympia, Washington 98504-7600 • (206) 459-6000

April 30, 1993

Mr. Dean Fowler  
Utility Division  
Spokane County Public Works  
West 1026 Broadway  
Spokane, WA 99260

Dear Mr. Fowler:

Re: Colbert Landfill/Conceptual Closure Plan

In accordance with the Consent Decree, the Department of Ecology has reviewed the conceptual closure plan submitted under the schedule that was approved in August of 1992. We have reviewed the plan for compliance with the Minimum Functional Standards (MFS) for Solid Waste Handling [WAC 173-304]. Our comments follow:

GENERAL COMMENTS

- 1) The conceptual design generally fulfills the document's objective with respect to the MFS. The appropriate sections of the MFS (those relating to closure and cover design, gas control, surface water control, and post-closure monitoring) have been identified and discussed. Where design criteria are provided in the MFS, they have been identified and applied in the conceptual design.
- 2) The buried waste on the east half of the landfill seems to be emitting more gas and may end up settling more than the west half. As a result the east half of the landfill might benefit from a greater final slope (4%), in order to avoid water ponding and additional maintenance in the future due to waste settlement.
- 3) It may be useful to provide clean-outs for the low points in the gas collection pipe system. This may be more detail than suggested for in a conceptual plan.

USEPA SF



1414054

RECEIVED  
MAY 8 1993  
SUPERIOR REGIONAL OFFICE

- 4) The document should be reviewed thoroughly for spelling and other typographic errors. Examples of substitution errors found in the document include "chronographic" for "chromatograph", "aerial" for "areal", "rate" for "range", and "permitted" for "perimeter".

SPECIFIC COMMENTS

5) 2.3.3 Landfill Gas Investigation

- A. Paragraph 9, page 9 - The text identifies the model used to evaluate soil gas benzene emissions as "...an atmospheric computer dispersion model..". While this conjures some interesting images, it is probably more clearly described as an atmospheric dispersion computer model.

6) 3.1.1 Regulatory Requirements

- A. Paragraph 2, page 14 - The text incorrectly cites the MFS requirements for site grading as WAC 173-304-160. The correct citation is WAC 173-304-460. This error occurs at several subsequent citations as well.

7) 3.3 Landfill Gas

- A. Paragraph 2, page 23 - The text identifies a peak methane concentration at the landfill of 180% of the lower explosive limit (LEL), and refers to Figure 5. Figure 5 shows a zone along the northeast landfill boundary with a maximum methane concentration of at least 240% of LEL. From the figure, this area appears to extend to areas off the landfill property to the north. The text should provide a more complete discussion of the magnitude and location of this zone with regard to the landfill cover and gas control system designs.

8) 3.3.2.1 Design Objectives

- A. Paragraph 3, page 25 - The text estimates the rate of production of methane in the east portion of the landfill to be in the range of 50,000 to 150,000 ft<sup>3</sup> per day. The assumptions provided in the text aren't adequate to reproduce this estimate. The text should provide the remainder of the parameters necessary,



Mr. Dean Fowler  
Page 3 of 3  
April 30, 1993

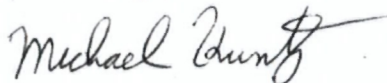
including the average density of the refuse and the moisture content of the refuse.

9) 3.4.4 Planned Design Concept

- A. Paragraph 5, page 34 - The units of peak storm water run-off are expressed in the text as cubic yards per second, but are abbreviated as cubic feet per second.

If you have any questions regarding this letter, please do not hesitate to contact me at (206) 438-3079.

Sincerely,



Michael Kuntz  
Toxics Cleanup Program

MK:jw

cc: Steve Holderby, Spokane County Health  
Neil Thompson, EPA